MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

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# MULTIMEDIA UNIVERSITY

# FINAL EXAMINATION

**TRIMESTER 1 2022-2023 (TERM ID 2215)**

## DPF5214 - PERSONAL FINANCE & INSURANCE

20 FEBRUARY 2023
9:00 A.M. – 11:00 A.M.
(2 Hours)

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**INSTRUCTIONS TO STUDENTS**

1. This question paper consists of 7 pages excluding the cover page.
2. This question paper is divided into two parts. Part I consists of 20 multiple choice questions and Part II consists of 3 structured questions. Attempt **ALL** questions.
3. Selected table and formulae are attached at the end of the question paper.
4. Please use **pen** to write the answers.
5. Please print all your answers for Part I and II in the **Answer Booklet** provided.

## PART I: 20 MULTIPLE-CHOICE QUESTIONS (TOTAL: 30 MARKS)

1. A debt-service ratio refers to:
   a) how much of your income is being used to service debt repayments.
   b) how much of your income is being used to pay mortgage loan.
   c) how much of your income is being used to pay insurance loan.
   d) None of the above

2. Drawbacks of home ownership include all of these except:
   a) limited mobility
   b) financial uncertainty
   c) maintenance and repairs
   d) lower initial costs

3. Reinstatement value basis is:
   a) when the insurer pays the full cost to repair or replace the damaged or lost item and depreciation is not considered.
   b) when the insurer pays based on the current replacement cost of the damaged or lost item minus depreciation.
   c) when the insurer pays based on the current replacement cost of the damaged or lost item plus administrative fees.
   d) when the insurer pays the full cost to repair or replace the damaged or lost item plus deductible.

4. Indemnity basis is:
   a) when the insurer pays the full cost to repair or replace the damaged or lost item and depreciation is not considered.
   b) when the insurer pays based on the current replacement cost of the damaged or lost item minus depreciation.
   c) when the insurer pays based on the current replacement cost of the damaged or lost item plus administrative fees.
   d) when the insurer pays the full cost to repair or replace the damaged or lost item plus deductible.

5. In the world of insurance, a second-party refers to the:
   a) policy holder
   b) insurance company.
   c) everyone else.
   d) bank.

***Continued..***

6. Imagine you are driving your car with your friend. Your friend decides to break your window and throw a can of soda out the window, for whatever reason. The can hits a guy just walking by, he falls and has a bleeding head wound. If this scenario happened, you could be sued for causing injury to others because the can came from your car. What type of additional insurance coverage you should take to protect yourself from being sued by the wounded guy?
   a) Breakage of windscreen
   b) Legal liability of passengers
   c) Special perils
   d) No such insurance coverage

7. People purchase a policy; the firm assumes the risk for a fee called:
   a) premium
   b) discount
   c) hazard
   d) perils

8. Which of these statements is not true about No Claim Discount (NCD)?
   a) It encourages insured drivers to drive safely.
   b) The NCD indirectly helps to reduce the number of road accidents.
   c) Once you make a claim, your NCD will increase the following year.
   d) It is reward scheme received by motor policy holders for not making a claim during the preceding 12 months.

9. The individual designated by the owner of the life insurance policy to receive the policy's proceeds upon the death of the insured is called the
   a) witness.
   b) insured.
   c) policy holder.
   d) beneficiary.

10. What amount would a person with actual cash value (ACV) coverage receive for one-year-old home stereo destroyed by a fire? The home stereo would cost RM6,000 to replace today and had an estimated life of 6 years.
   a) RM3,000
   b) RM4,000
   c) RM5,000
   d) RM6,000

11. What would it cost an insurance company to replace a family's personal property that originally cost RM150,000? The replacement costs for the items have increased 10%.
   a) RM150,000
   b) RM155,000
   c) RM165,000
   d) RM170,000

***Continued..***

12. A _____ is the legal declaration of a person's mind as to the disposition of his or her property after death.
    a) witness
    b) will
    c) contract
    d) plan

13. If your house is insured RM1,000,000 and your policy has a 2% deductible. In an event of a RM15,000 loss, how much will the insurance company pay for the loss?
    a) RM10,000
    b) RM15,000
    c) RM20,000
    d) None

14. Sources of retirement income can come from these except:
    a) Social security
    b) Investments
    c) Savings
    d) Account payable

15. Intestate is a condition when:
    a) someone dies without a will.
    b) someone revokes the will.
    c) someone changes the will.
    d) someone cancels the will.

16. Sarah has a two-year old daughter. She is concerned with her child's college education fees. She plans to save every year so that when her daughter is 18 years old, she would have RM30,000. What is the annual saving she must make in an account earning 8% interest rate? (*Round up your answer to the nearest integer.*)
    a) RM840
    b) RM876
    c) RM990
    d) RM1,875

17. Elsa, a widow, has take-home pay of RM500 a week from her part-time job. Her disability insurance coverage replaces 50% of her earnings after a four-week waiting period. What amount would she receive in disability benefits if an illness kept Elsa off work for 20 weeks?
    a) RM2,500
    b) RM4,000
    c) RM5,000
    d) RM10,000

***Continued..***

18. In the insurance context, _____ is the upfront amount you pay before your insurance plan starts covering the rest of the bill. Once you meet the amount, only then your insurance company will step in to pay.
    a) Premium
    b) Deductible
    c) Discount
    d) Actual cash value

19. Major responsibilities of an executor of a will includes all of the following except:
    a) Prepare an inventory of assets
    b) Liquidate and reinvest other assets if necessary to pay debts and claims
    c) Distribute assets, based on the instructions in the will
    d) Change some clauses in the will

20. Which of the following does not represent a speculative risk?
    a) Insurable
    b) Gambling
    c) Investing
    d) Guessing game

**PART II: STRUCTURED QUESTIONS** **(TOTAL: 70 MARKS)**

**Question 1**

a) Discuss the three characteristics of mutual fund. (9 marks)

b) Define net asset value (NAV) and the NAV of an investment company with $10,000,000 in assets, $500,000 in current liabilities and 1,000,000 shares outstanding. (6 marks)

c) You have $10,000 to invest in a stock mutual fund. You have a choice of investing in a no-load fund by sending your investment directly to the fund or purchasing a mutual fund that has a 3% load and has been recommended by a broker. Each fund has a NAV of $25 per share, and their stock portfolios are very similar. You expect each fund's NAV to be $28 at the end of the year (assuming there are no dividends or capital gain distributions over the year). Compare the returns between a no-load fund and a load fund. (10 marks)

**(Total: 25 marks)**

***Continued..***

## Question 2

You are planning to get married within two years and settle down. Recently, you and your fiancé went out for house window shopping and saw an advertisement of a serviced apartment. You collected the additional information about the apartment and possible mortgage loan.

- 3 bedrooms and 2 bathrooms
- 926 sq ft
- Partially furnished
- Built-in kitchen cabinet
- Easy access to highways
- Near to several public and private schools
- Starting price is from $416,000
- 30-year loan at 3% interest rate
- Down payment of 10% of the home purchase price

As a young couple, you and your fiancé intend to combine income so that both of you can afford to own a house before starting a family together. Some of your and your fiancé's combined monthly income and debt commitments are listed as follows:

- Gross incomes, $6,900
- Credit card payment, $150
- Automobile loans, $800
- Insurance premium, $100

a) Compute your debt service ratio. (5 marks)

b) Find your affordable monthly mortgage payment, affordable mortgage amount and affordable home purchase price using 38% rule of thumb. (10 marks)

c) Suppose you wanted to have $3,000 in two years so that you would have more than enough to accumulate the down payment to purchase your desired home. How much money should you deposit now in an account earning an annual rate of 7%? (5 marks)

**(Total: 20 marks)**

*Continued..*

## Question 3

The financial situations of five distinctive households are described as follows.

***i) Adam and Hawa a.k.a. 'The Adams'***

The Adams household earns RM50,000 per year. The Adams are in their early 30s and they have two very young children. Adam is the present breadwinner, and his wife, Hawa plans to stay at home for several more years. The Adams have discussed having more children. They have large credit card balances, two car loans, and a mortgage loan. Their RM50,000 income barely covers their existing expenses, and they have very little savings. They tend to overspend on their children and will likely continue to do so. They have a goal of sending their children to private universities, and they would like to purchase a bigger home in the future.

***ii) Ben and Karen a.k.a. 'The Bens'***

The Bens household also earns RM50,000. They are in their late 50s and currently enjoying the retirement. They have established a very large amount of savings and a substantial retirement account, so they could retire now if they had to. They have completely paid off their mortgage and do not have any other debt.

***iii) Chandran and Selvi a.k.a. 'The Chandrans'***

The Chandrans have reasonably secure jobs. Each of them makes about RM50,000 annually. They own a home with a RM100,000 mortgage, and they owe RM10,000 on car loans, RM2,000 in personal debt, and RM1,000 in credit card loans. They have no other debt. They have no plans to increase the size of their family in the near future. They estimate that funeral expenses will be RM5,000.

***iv) Dylan***

Dylan is the wage earner in a "typical family," with RM60,000 gross annual income.

***v) Ehsan and Nur a.k.a. 'The Ehsans'***

The Ehsans are married and have two children, ages 5 and 8. Nur is a "nonworking" spouse who devotes all of her time to household activities.

You are a certified financial planner who happens to be a neighbour to these five families. As a friendly neighbour, they rely on you to advise them the type of life insurance that are suitable to their family needs and financial situations. Find the amount of life insurance using the following method:

a) Multiple income method for The Adams and The Bens (5 marks)
b) DINK method for The Chandrans (6 marks)
c) Easy income method for Dylan (5 marks)
d) Nonworking spouse method for The Ehsans (5 marks)
e) Based on the methods used above, why is there variation in the methods used to estimate the amount of life insurance needed? (4 marks)

**(Total: 25 marks)**

**Continued..**

## SELECTED TABLE AND FORMULAE

Exhibit 9-9 Mortgage payment factors (principal and interest factors per $1,000 of loan amount)

| Term Rate | 30 Years | 25 Years | 20 Years | 15 Years |
|---|---|---|---|---|
| 3.0% | $4.22 | $4.74 | $5.55 | $6.91 |
| 3.5 | 4.49 | 5.01 | 5.80 | 7.15 |
| 4.0 | 4.77 | 5.28 | 6.06 | 7.40 |
| 4.5 | 5.07 | 5.56 | 6.33 | 7.65 |
| 5.0 | 5.37 | 5.85 | 6.60 | 7.91 |
| 5.5 | 5.68 | 6.14 | 6.88 | 8.17 |
| 6.0 | 6.00 | 6.44 | 7.16 | 8.43 |
| 6.5 | 6.32 | 6.67 | 7.45 | 8.71 |
| 7.0 | 6.65 | 7.06 | 7.75 | 8.98 |
| 7.5 | 6.99 | 7.39 | 8.06 | 9.27 |
| 8.0 | 7.34 | 7.72 | 8.36 | 9.56 |
| 8.5 | 7.69 | 8.05 | 8.68 | 9.85 |

$$PV = \frac{FV_n}{(1+r)^n}$$

$$FV = PV(1+r)^n$$

$$PV_A = PMT\left[\frac{1-\frac{1}{(1+r)^t}}{r}\right]$$

$$FV_A = PMT\left[\frac{(1+r)^t-1}{r}\right]$$

**End of paper**